

**REPORT**  
**OF THE**  
**DEPARTMENT OF HEALTH**  
**OF THE**  
**PANAMA CANAL**  
**FOR THE**  
**MONTH OF DECEMBER, 1916**

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**D. C. HOWARD**

**Lieut. Colonel, Medical Corps, United States Army,  
Chief Health Officer, Balboa Heights, Canal Zone**

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*Gift of the Panama Canal Museum*

**WASHINGTON**

**1917**



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## LETTER OF TRANSMITTAL.

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THE PANAMA CANAL,  
CANAL ZONE, HEALTH DEPARTMENT,  
*Balboa Heights, Canal Zone, January 10, 1917.*

Lieut. Col. JAY J. MORROW,  
*Acting Governor, The Panama Canal,  
Balboa Heights, Canal Zone.*

SIR: I have the honor to submit the following report of the operations of the department of health for the month of December, 1916.

Very respectfully,

D. C. HOWARD,  
*Chief Health Officer.*

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### GENERAL REMARKS.

The general health of employees and nonemployees in the Canal Zone and the terminal cities has continued good.

The two cases of smallpox noted in last month's report were discharged well from Ancon Hospital during the month. No cases have appeared since November 23 last.

Two mild cases of anterior poliomyelitis appeared on December 19 in the Balboa district. The cases were immediately isolated in Ancon Hospital, and all contacts held under close observation. To date no secondary cases have appeared. Both cases occurred in children of the same family, and as they had not been away from the Isthmus since February, 1916, it is assumed that the infection was contracted here. A few sporadic cases of this disease appeared on the Isthmus in 1912, but the disease did not then assume epidemic proportions, and no general outbreak is expected.

The annual physical examination of gold employees was completed during the month, with the exception of employees absent on leave, and a few at outlying stations.

No disease of a quarantinable nature originated on or was brought to the Isthmus during the month.

## VITAL STATISTICS.

## EMPLOYEES.

The following statistics are based upon the number of names appearing on the rolls for the preceding month, which was 34,327.

The total number of admissions to hospitals and quarters was 938, a rate of 327.91,<sup>1</sup> as compared with 315.83 for the preceding month, and 307.23 for the corresponding month of last year.

The total number of deaths from all causes was 22; of these 17 were from disease, giving a death rate of 5.94, as compared with 3.08 for the preceding month, and 5.01 for the corresponding month of last year.

The constantly noneffective rate was 8.86, as compared with 8 for the preceding month, and 10.31 for the corresponding period of last year.

The total admission rate for malaria, hospitals and quarters, was 8.39, as compared with 5.48 for the preceding month and 26.11 for the corresponding month of last year. The constantly noneffective rate for malaria was 0.28, as compared with 0.24 for last month and 0.88 for the month of December last year.

The diseases causing the highest admission rates to hospital, in the order of their numerical importance, were: (1) Venereal diseases; (2) malaria; (3) tuberculosis; (4) other diseases of the intestines; and (5) chickenpox. These five diseases caused 30 per cent of all admissions to hospitals, venereal diseases alone causing 15 per cent of all admissions and malaria 6 per cent.

There were two admissions for typhoid fever during the month, giving an admission rate of 0.70, as compared with 0.68 for the preceding month and 0.36 for the corresponding period of last year.

## EFFECTS OF RACE.

The admission rate to hospital, and the death rate from disease, for white employees, was 253.70 and 5.07 respectively, as compared with 250.05 and 0.00 for the preceding month, and 283.88 and 2.65 for the corresponding month of last year. For black employees, the admission rate to hospital, and the death rate from disease, were 66.49 and 6.08, respectively, as compared with 65.68 and 3.56 for the preceding month, and 135.18 and 5.37 for the corresponding month of last year.

The constantly noneffective rates were 18.73 for whites and 7.29 for blacks.

The admission rate to hospitals and quarters for malaria was 22.83 for whites and 6.08 for blacks, as compared with a rate of 7.65 for whites and 5.14 for blacks for the preceding month and 68.98 for whites and 19.43 for blacks for the corresponding month of last year.

There were two deaths among American employees during the month, giving a rate of 5.68, as compared with 2.84 for the preceding month and 2.95 for the month of December last year.

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<sup>1</sup> All morbidity and mortality rates are computed as equivalent annual per 1,000.



## DEPORTATIONS.

There were two deportations accomplished during the month, both employees, and both for disease.

## CANAL ZONE.

## EMPLOYEES AND NONEMPLOYEES.

The population of the Canal Zone, according to the last police census taken in June, 1916, is 31,048. This includes employees, nonemployees, and military garisons residing or stationed within the Canal Zone. Among this population there were 26 deaths during the month of December, 21 of which were from disease, giving a death rate of 8.12, as compared with 7.73 for the preceding month and 13.29 for the corresponding month of last year.

Of the total deaths from disease the percentage under 5 years of age was 29 as compared with 20 for last month.

There were 59 births reported, giving a rate of 22.80; of these 19 were white and 40 colored.

There were 5 deaths of children under 1 year of age, 1 white and 4 colored, giving an infant mortality rate, based upon the number of births reported for the month, of 53 for white and 100 for colored children, with a general average of 85.

The percentage of stillbirths to total births was 8.

## PANAMA CITY.

## EMPLOYEES AND NONEMPLOYEES.

The population of the city is 60,778, among whom there were 152 deaths during the month of December; of these 146 deaths were from disease, giving a rate of 28.83, as compared with 34.75 for the preceding month and 31.01 for the corresponding month of last year.

Of the total deaths from disease the percentage under 5 years of age was 50, as against 52 for last month.

The principal causes of death as compared with last month were as follows:

	November.	December.
Pneumonia (including lobar and broncho).....	24	24
Tuberculosis (various organs).....	28	23
Diarrhea and enteritis (under 2 years).....	24	17

There were 226 births reported, giving a rate of 44.62. There were 61 deaths under 1 year of age, giving an infant mortality rate, based on the number of births reported for the month, of 270.

The percentage of stillbirths to total births was 12.

## COLON.

## EMPLOYEES AND NONEMPLOYEES.

The population of the city is 24,693, among whom there were 58 deaths during the month of December; of these 53 deaths were from disease, giving a rate of 25.76, as compared with 25.27 for the preceding month, and 24.13 for the corresponding month of last year.

Of the total deaths from disease the percentage under 5 years of age was 51, as compared with 43 for the preceding month.

The principal causes of death as compared with last month were as follows:

	November.	December.
Pneumonia (including lobar and broncho).....	10	10
Tuberculosis (various organs).....	5	7
Bronchitis (acute and chronic).....	9	6

There were 90 births reported, giving a rate of 43.74. There were 20 deaths under 1 year of age, giving an infant mortality rate, based on the number of births reported for the month, of 222.

The percentage of stillbirths to total births was 4.

## DIVISION OF HOSPITALS.

## ANCON HOSPITAL.

The average number of patients constantly in the hospital proper during the month was 429, as compared with 423 for the preceding month and 473 for the corresponding period of last year. The average number of days' treatment for each employee admitted was 20.47. The daily per capita cost per patient for November was \$1.71.

Twenty-nine cases of malaria were admitted against 36 in November, 52 for October, 62 for September, 124 for August, and 143 for July. Seven deaths occurred from tuberculosis.

Detailed statistics are shown in Table XIII.

*Board of health laboratory.*—No work, outside of routine, was performed during the month.

*Corozal Hospital.*—The average number of insane patients constantly cared for during December was 319 as compared with 315 for the preceding month and 264 for the corresponding month of last year.

During the month there were 19 admissions, 8 deaths, 11 discharges, and 2 transfers.

The daily per capita cost for November was \$0.45 gross.

Detailed statistics are shown in Table XIII.

*Chronic ward.*—During the month there were no admissions, deaths, or discharges. The average number of patients constantly cared for was 24. The daily per capita cost for November was \$0.34 gross.

## COLON HOSPITAL.

The average number of patients constantly in hospital was 44 as compared with 43 for the preceding month and 39 for the corresponding month of last year. The average number of days' treatment for each employee admitted was 9.48.

The daily per capita cost per patient for November was \$2.23 gross.

Detailed statistics are shown in Table XIV.

## PALO SECO LEPER ASYLUM.

The average number of patients constantly cared for during the month was 66.51 as compared with 68.56 for the preceding month and 58 for the month of December last year.

During the month there was 1 admission and 1 death.

The daily per capita cost for November was \$0.81 gross. Detailed statistics are shown in Table XV.

## SANTO TOMAS HOSPITAL.

One thousand three hundred and eighty patients were treated in the hospital during the month of December as compared with 1,371 for the preceding month and 1,468 for the corresponding month of last year. The daily average number of patients treated was 440 as compared with 450 for last month and 462 for the corresponding month of last year. The total number of days' treatment was 13,637 as compared with 13,340 for last month.

The number of deaths was 84, with Bright's disease (chronic nephritis), diarrhea and enteritis, and tuberculosis the chief causes in the order named.

Four cases of dysentery were treated, with no deaths; 11 cases of pneumonia, with 1 death; and 1 case of typhoid, with no death.

Detailed statistics are shown in Table XVI.

## DISTRICT DISPENSARIES.

The district having the highest admission rate for malaria was Culebra-Empire, with an average weekly percentage of 0.055. That having the lowest was Balboa, with a weekly percentage of 0.01. Detailed statistics are shown in Table IX.

## ZONE SANITATION.

The routine work of grass cutting, ditch cleaning, and oiling, was carried on in the several districts as usual. The transition from the rainy to the dry season, with the change of winds incident thereto, has taken place during the month. At this time, extraordinary vigilance is required to prevent mosquito breeding and a subsequent rise in the malarial admission rate. This has been

watched carefully and there has been no continued rise in the daily mosquito catch in any district.

With the cessation of the rains, large forces of men have been quartered by the supply department in camps outside of the sanitated districts, for clearing land for pastures. These camps are some of them necessarily in areas in which malaria bearing mosquitoes are abundant, and many of the men are careless regarding anti-malarial precautions. The noneffective rate in these camps from malaria will be in proportion to the lack of intelligent co-operation on the part of foremen in enforcing antimalarial measures, and the use of mosquito bars particularly. The surveying parties engaged for the past 18 months in marking the 100-foot contour line around Gatun Lake and its tributaries, have demonstrated conclusively that men can travel and camp in the jungle with small risk of malarial infection, if ordinary antimalarial precautions are taken. Malaria, even under these conditions, must be regarded as a preventable disease.

#### SANITATION—PANAMA.

During the month there were reported 8 admissions to Ancon Hospital and 11 to Santo Tomas Hospital for malaria, from the city of Panama, making a total of 19 cases. Fifty per cent of the cases occurring were noted during the last week of the month, and a careful search for undetected breeding was made covering the various districts, but no such place was found. It is thought that the seasonal changes contributed to this sudden increase in the cases, as has been noted in the past when we first pass from the wet season into the dry, or vice versa.

One case of diphtheria was reported during the month which terminated fatally. Several other cases were reported, however, which, while suspicious, were not considered positive on microscopical findings. This is the lowest number of acses reported since early in the year, and the decline has been a constant one since the introduction of radical measures against a small outbreak which took place in July and August.

*Child Hygiene.*—This work has been continued during the month with gratifying results. The registered nurse in charge reports:

Babies registered during the month.....	144
Babies died during the month.....	2
Total number registered January 1, 1917.....	204
Babies reporting at station weekly for weighing and inspection.....	119
Number of visits made to homes of babies during month.....	589

#### SANITATION—COLON.

Owing to the progressive extension of the permanent anti-mosquito work, consisting of dry and hydraulic filling and cement drains, the month of December saw the complete cessation of anopheles breeding in the Colon-Cristobal districts. The result of this has been that the highest rate for 1916 was two-thirds lower than that for 1915. The rate in 1916 touched zero and remaining there for some time, five times as often as in 1915.

The work on the sewer from Colon, which was changed from Fox River to empty into the bay, on account of the building of the new residential section, was completed, and a new pumping station and sump is now being constructed near this new residential site.

The schools in the district were inspected and found to be in satisfactory condition. All unprotected children were vaccinated, and no epidemic disease interfered with the work of the schools.

#### QUARANTINE TRANSACTIONS.

The quarantine situation in Central and South America<sup>a</sup> has shown no further changes, nor have there been any unusual developments with reference to the report of yellow fever from Barbados and Martinique on the Atlantic side. The work of the quarantine division during this month has been conducted without special incident.

With reference to the cattle industry on the Zone, no cases of anthrax have occurred. Ante and post-mortem inspections of food animals for December have been as follows: 1,004 cattle ante and post-mortem inspected; 20 hogs ante and post-mortem inspected. The usual system of inspection was continued and microscopic examination made from splenic smear of each animal. Quarantine inspections were made upon 1,071 cattle received at Cristobal from Colombia, of which number 997 inspections were for the supply department. Quarantine inspections were also made on 20 swine received from Colombia. There were 518 cattle and 328 swine quarantine inspected for shipment from Panama to Colon.

TABLE I.—ADMISSIONS, DEATHS, AND NONEFFECTIVE RATES FOR EMPLOYEES; DEATHS OF RESIDENTS OF PANAMA, COLON, AND THE ZONE.

## ABSOLUTE NUMBERS.

	Number of employees.	Admissions to hospitals.			Deaths.			Noneffective from sickness.	
		Total.	Disease.	External causes.	Total.	Disease.	External causes.	Days treated.	Constantly non-effective.
<i>December, 1916.</i>									
White.....	4,730	125	100	25	4	2	2	2,746	88.59
Black.....	29,597	252	164	88	18	15	3	6,686	215.67
Total.....	34,327	377	264	113	22	17	5	9,432	304.26
<i>November, 1916.</i>									
White.....	4,703	117	98	19	1	.....	1	2,459	81.98
Black.....	30,328	259	166	93	12	9	3	5,945	198.15
Total.....	35,031	376	264	112	13	9	4	8,404	280.13
<i>December, 1915.</i>									
White.....	4,523	107	85	22	1	1	.....	2,568	82.83
Black.....	29,028	327	254	73	16	13	3	8,150	262.90
Total.....	33,551	434	339	95	17	14	3	10,718	345.73

PROPORTIONATE NUMBERS.<sup>1</sup>

<i>December, 1916.</i>									
White.....	4,730	317.12	253.70	63.42	10.15	5.07	5.07	.....	18.73
Black.....	29,597	102.17	66.49	35.67	7.30	6.08	1.22	.....	7.29
Total.....	34,327	131.79	92.29	39.50	7.69	5.94	1.79	.....	8.86
<i>November, 1916.</i>									
White.....	4,703	298.53	250.05	48.48	2.55	.....	2.55	.....	17.43
Black.....	30,328	102.48	65.68	36.79	4.75	3.56	1.19	.....	6.53
Total.....	35,031	128.80	90.43	38.37	4.45	3.08	1.37	.....	8.00
<i>December, 1915.</i>									
White.....	4,523	283.88	225.51	58.37	2.65	2.65	.....	.....	18.31
Black.....	29,028	135.18	105.00	30.18	6.61	5.37	1.24	.....	9.05
Total.....	33,551	155.22	121.25	33.97	6.08	5.01	1.07	.....	10.31

<sup>1</sup> Annual average per 1,000.

TABLE I-A.—DEATHS OF RESIDENTS OF THE CITIES OF PANAMA, COLON, AND THE CANAL ZONE.

Place.	Popula- tion.	Deaths.			Annual average per 1,000.		
		Total.	Dis- ease.	External causes.	Total.	Dis- ease.	External causes.
<i>December, 1916.</i>							
Panama.....	60,778	152	146	6	30.01	28.83	1.18
Colon.....	24,693	58	53	5	28.19	25.76	2.43
Canal Zone.....	31,048	26	21	5	10.05	8.12	1.93
Totals.....	116,519	236	220	16	24.31	22.66	1.65
<i>November, 1916.</i>							
Panama.....	60,778	182	176	6	35.93	34.75	1.18
Colon.....	24,693	53	52	1	25.76	25.27	.49
Canal Zone.....	31,048	24	20	4	9.28	7.73	1.54
Totals.....	116,519	259	248	11	26.67	25.54	1.13
<i>December, 1915.</i>							
Panama.....	60,373	161	156	5	32.00	31.01	.99
Colon.....	29,331	60	59	1	24.54	24.13	.41
Canal Zone.....	31,598	38	35	3	14.43	13.29	1.14
Totals.....	121,302	259	250	9	25.62	24.73	.89

TABLE II.—DEATHS BY AGE, COLOR, AND SEX.

	White.			Colored.			Yellow.			Totals.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 year.....	6	3	9	40	36	76	1	....	1	47	39	86
1 to 4 years.....	....	....	....	15	9	24	....	....	....	15	9	24
5 to 10 years.....	1	....	1	....	3	3	....	....	....	1	3	4
11 to 20 years.....	....	....	....	3	6	9	....	....	....	3	6	9
21 to 30 years.....	4	3	7	16	16	32	1	....	1	21	19	40
31 to 40 years.....	5	....	5	19	9	28	1	....	1	25	9	34
41 to 50 years.....	4	1	5	10	2	12	1	....	1	15	3	18
51 to 60 years.....	3	....	3	7	1	8	....	....	....	10	1	11
61 to 70 years.....	2	....	2	2	2	4	....	....	....	4	2	6
71 to 80 years.....	1	....	1	....	1	1	....	....	....	2	....	2
81 to 90 years.....	....	....	....	....	2	2	....	....	....	....	2	2
Total.....	26	7	33	113	86	199	4	....	4	143	93	236

TABLE III.—DEATHS BY NATIONALITY.

	Employees.		Nonemployees.		Total.		Grand total.
	Male.	Female.	Male.	Female.	Male.	Female.	
Austria.....			2		2		2
Barbados.....	4	1	20	19	24	20	44
British Guiana..	1				1		1
China.....			4		4		4
Colombia.....			9	7	9	7	16
Costa Rica.....	1				1		1
England.....				1		1	1
France.....			2		2		2
Greece.....	1		1		2		2
Grenada.....			3	1	3	1	4
Guadeloupe.....	1			1	1	1	2
Hayti.....				1		1	1
India.....				1		1	1
Italy.....				1		1	1
Jamaica.....	6		30	30	36	30	66
Martinique.....			3		3		3
Montserrat.....	1		1		2		2
Nicaragua.....			1		1		1
Norway.....			1		1		1
Panama.....	1		35	25	36	25	61
Peru.....				2		2	2
Portugal.....			1		1		1
St. Lucia.....	1		2	2	3	2	5
St. Vincent.....			1	1	1	1	2
Spain.....			1		1		1
Trinidad.....			1		1		1
United States....	2		4		6		6
Venezuela.....	1				1		1
Unknown.....	1				1		1
Total.....	21	1	122	92	143	93	236

TABLE IV.—DEATH RATES AMONG AMERICANS ON THE ISTHMUS CONNECTED WITH THE PANAMA CANAL.

	Number of deaths.	Annual average per 1,000.
White employees from the United States (4,223):		
Disease.....	1	2.84
External causes.....	1	2.84
Total.....	2	5.68
White women and children from the United States (3,852):		
Disease.....		
External causes.....		
Total.....		
White employees and their families from the United States (8,075):		
Disease.....	1	1.49
External causes.....	1	1.49
Total.....	2	2.97
Total number of Americans on the Canal Zone, including soldiers and their families (17,139):		
Disease.....	2	1.40
External causes.....	3	2.10
Total.....	5	3.50



TABLE V.—CAUSES OF DEATHS OF EMPLOYEES OF THE PANAMA CANAL AND PANAMA RAILROAD COMPANY.

	White.	Colored.	Total.
<i>Disease.</i>			
Tuberculosis of the lungs.....		2	2
Disseminated tuberculosis.....	1	1	2
Lobar pneumonia.....		3	3
Chronic nephritis.....		2	2
Aneurysm.....	1	1	2
Cerebral hemorrhage.....		1	1
Duodenal ulcer.....		2	2
Stricture of urethra.....		1	1
Tertiary syphilis.....		1	1
General paralysis of the insane.....		11	1
Total.....	2	15	17
<i>External causes.</i>			
Drowning, accidental.....	2	2	4
Traumatism, accidental.....		1	1
Total.....	2	3	5
Grand total.....	4	18	22

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOYEES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE.

	Pana- ma.		Colon.		Canal Zone.		Total.		Grand total.
	M.	F.	M.	F.	M.	F.	M.	F.	
<i>General diseases.</i>									
Malarial fever, estivoautumnal.....					1		1		1
Diphtheria and croup.....	1						1		1
Purulent infection and septicemia.....	2						2		2
Pyemia.....		1						1	1
Tetanus.....	2						2		2
Pellagra.....		3		2				5	5
Beriberi.....		1						1	1
Tuberculosis of the lungs.....	11	11	4	2	3		18	13	31
Tuberculosis meningitis.....	1						1		1
Disseminated tuberculosis.....			1		1		2		2
Syphilis, tertiary.....	1			1			1	1	2
Syphilis, hereditary.....			2				2		2
Cancer and other malignant tumors of the buccal cavity.....	1						1		1
Cancer and other malignant tumors of the female genital organs.....		1						1	1
Cancer and other malignant tumors of other organs and of organs not specified.....			1				1		1
Alcoholism (acute and chronic).....	1						1		1

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOYEES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE—Continued.

	Pana- ma.		Colon.		Canal Zone.		Total.		Grand total.
	M.	F.	M.	F.	M.	F.	M.	F.	
<i>Diseases of the nervous system and of the organs of special sense.</i>									
Locomotor ataxia.....	2						2		2
Cerebral hemorrhage.....		1		1	1		1	2	3
Softening of the brain.....	1						1		1
General paralysis of the insane.....	1				1		2		2
Convulsions of infants (under 5 years of age).....	1						1		1
Other diseases of the nervous system.....				1				1	1
<i>Diseases of the circulatory system.</i>									
Pericarditis.....	1						1		1
Organic diseases of the heart.....	4	1		1	1		5	2	7
Aneurism.....					2		2		2
Arterio-sclerosis.....	2						2		2
<i>Diseases of the respiratory system.</i>									
Acute bronchitis.....	2	5	1				3	5	8
Chronic bronchitis.....	2		3	2			5	2	7
Broncho-pneumonia.....	8	9	3	3			11	12	23
Pneumonia (qualified).....	3		1				4		4
Lobar pneumonia.....	2	2	2	1	3		7	3	10
<i>Diseases of the digestive system.</i>									
Diarrhea and enteritis (under 2 years).....	10	7	2	3	1	1	13	11	24
Colitis.....	1	3					1	3	4
Diarrhea and enteritis (over 2 years).....		1						1	1
Acute appendicitis.....			1				1		1
Hernia, intestinal obstruction.....	1	1					1	1	2
Duodenal ulcer.....	2						2		2
Cirrhosis of the liver.....	1						1		1
Simple peritonitis (nonpuerperal).....				1				1	1
<i>Nonvenereal diseases of the genito-urinary system.</i>									
Acute nephritis.....	2	3	2			1	4	4	8
Bright's disease (chronic nephritis).....	5	3	4	1		1	9	5	14
Other diseases of the kidney and annexa.....			1				1		1
Pyelo-nephrosis.....		1						1	1
Diseases of the urethra, urinary abscess, etc.....	1						1		1
<i>The puerperal state.</i>									
Eclampsia.....						1		1	1
<i>Malformations.</i>									
Congenital malformations (stillbirth not included).....	2	1					2	1	3
<i>Diseases of early infancy.</i>									
Premature birth.....	2	2		2			2	4	6
Congenital debility.....		2	1				1	2	3
Atrophy of infants.....				1				1	1
Malnutrition.....	2	2			2		4	2	6
Other causes peculiar to early infancy (including various consequences of labor).....	3	2		1	1		4	3	7
Lack of care.....			1				1		1

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION, (EMPLOYEES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE—Continued.

	Panama.		Colon.		Canal Zone.		Total.		Grand total.
	M.	F.	M.	F.	M.	F.	M.	F.	
<i>Old age.</i>									
Senility.....		1						1	1
<i>Affections produced by external causes.</i>									
Suicide by firearms.....	1						1		1
Acute poisonings.....			1				1		1
Burns (conflagration excepted).....	1						1		1
Accidental drowning.....			1		3		4		4
Traumatism by machines.....			1				1		1
Traumatism by other crushings.....	1		1		1		3		3
Railroad traumatism.....					1		1		1
Injuries by animals.....	1				1		1		1
Electricity (lighting excepted).....		1						1	1
Homicide by cutting or piercing instruments.....	1						1		1
Other external violence.....			1				1		1
<i>Ill-defined diseases.</i>									
Cause of death not specified or ill-defined.....		1						1	1
Total.....	86	66	35	23	22	4	143	93	236
Stillbirths.....	20	10	2	2	3	2	25	14	39
Grand total.....	106	76	37	25	25	6	168	107	275

DEATHS OF NONRESIDENTS.

Residence.	Nationality.	Color.	Sex.	Age.	Cause of death.
Interior of Panama.	St. Lucia....	Black...	Male....	.....	Acute alcoholism.
United States of America.	Colombia....	do.....	do.....	61	Uremia.
Agua Dulce, R. P.	Panama.....	do.....	do.....	45	Chronic nephritis.
Interior of Panama.	do.....	do.....	do.....	8	Cerebral meningitis.
Do.....	Jamaica....	do.....	do.....	40	Cardio-renal disease.
Do.....	do.....	do.....	do.....	50	Arterio-sclerosis.
Do.....	Panama....	White...	Female..	2 m.	Gastro-enteritis.
Do.....	do.....	Black...	Male....	2 d.	Congenital syphilis.
U. S. S. Poe.....	United States of America.	White...	do.....	47	Organic heart disease.
Interior of Panama.	Panama....	Black...	Female..	21	Puerperal septicemia.
Chorrera, R. P.	do.....	do.....	Male....	57	Pulmonary tuberculosis.
Interior of Panama.	do.....	do.....	do.....	66	Chronic nephritis.
Bocas del Toro, R. P.	Colombia....	do.....	do.....	22	Pulmonary tuberculosis.



## HOSPITALS OF THE PANAMA CANAL FOR OCTOBER, 1916.

[illegible]

TABLE VII.—DISCHARGES AND DEATHS IN HOSPITALS

Diseases.	Employees.											
	Discharges.						Deaths.					
	White.				Black.	White.				Black.		
	Ameri- cans.		Euro- peans.			Ameri- cans.		Euro- peans.				
	M.	F.	M.	F.		M.	F.	M.	F.			
<i>Diseases of the nervous system and of the organs of special sense.</i>												
Cerebral hemorrhage, apoplexy.....												
Softening of the brain.....												
Paralysis without specified cause.....	1											
General paralysis of the insane.....												
Other forms of mental alienation.....												
Dementia precox.....												
Hysteria.....												
Neuralgia.....												
Neuritis.....	1				1							
Other diseases of the nervous system.....												
Neurasthenia.....		1										
Diseases of the eyes and their annexa.....	1				7							
Diseases of the ears.....	3				1							
<i>Diseases of the circulatory system.</i>												
Organic diseases of the heart.....					1							
Aneurysm.....					1					1		
Arteriosclerosis.....												
Diseases of the veins (varices, hemorrhoids, phlebitis, etc.).....												
Hemorrhoids.....	1		1		3							
Varices.....					1							
Varicocele.....	2				1							
Phlebitis.....												
Lymphadenitis (nonvenereal).....			1		2							
<i>Diseases of the respiratory system.</i>												
Diseases of the nasal fossæ.....	7	1										
Adenoid vegetations.....												
Diseases of the thyroid body.....	1											
Acute bronchitis.....	3	1	2		1							
Chronic bronchitis.....												
Lobar pneumonia.....					4					3		

## OF THE PANAMA CANAL FOR DECEMBER, 1916—Continued.

[illegible]







TABLE VII.—DISCHARGES AND DEATHS IN HOSPITALS

Diseases.	Employees.											
	Discharges.						Deaths.					
	White.				Black.	White.				Black.		
	Ameri- cans.		Euro- peans.			Ameri- cans.		Euro- peans.				
	M.	F.	M.	F.		M.	F.	M.	F.			
<i>Nonvenereal diseases of the genito-urinary system and annexa.</i>												
Acute nephritis.....					2							
Bright's disease (chronic nephritis).....	1				2						2	
Pyelo-nephrosis.....												
Calculi of the urinary passages.....												
Diseases of the bladder.....	1											
Cystitis.....					1							
Diseases of the urethra, urinary abscess, etc.....	1				1						1	
Stricture of the urethra, nonvenereal.....												
Diseases of the prostate.....												
Nonvenereal diseases of the male genital organs.....	2											
Hydrocele.....					3							
Uterine hemorrhage (nonpuerperal).....												
Uterine tumor (noncancerous).....		1										
Other diseases of the uterus.....					1							
Metritis.....												
Cysts and other tumors of the ovary.....												
Salpingitis and other diseases of the female genital organs.....												
<i>The puerperal state.</i>												
Normal labor.....												
Accidents of pregnancy.....												
Extra-uterine pregnancy.....												
Hyperemesis gravidarum.....												
Abortion.....												
Puerperal hemorrhage.....												
Other accidents of labor.....												
Eclampsia.....												
<i>Diseases of the skin and of the cellular tissue.</i>												
Furuncle.....	3				1							
Carbuncle.....	1											
Acute abscess.....					1							

## OF THE PANAMA CANAL FOR DECEMBER, 1916—Continued.

Nonemployees.											Nonresidents.								Total admissions.	Total deaths.
Discharges.						Deaths.					Discharges.				Deaths.					
White.			Black.			White.			Black.		White.		Black.		White.		Black.			
Sol-d'rs.	Others.					Sol-d'rs.	Others.													
M.	M.	F.	M.	F.	M.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
2																		4		
1	1	1	1	4					1									10	3	
																		3		
																		1		
																		1		
			3															4		
	1																	3	1	
				1														1		
	1																	1		
																		2		
																		3		
			1															1		
			1															5		
			8		3													11		
			2		1													3		
			1															1		
			2		3													5		
			17		7													24		
			2															2		
				1														1		
			1															1		
			6		8													14		
					1													1		
			2		2													4		
			1		1				1									2	1	
																		4		
																		1		
																		2		



## OF THE PANAMA CANAL FOR DECEMBER, 1916—Continued.

[illegible]

TABLE VII.—DISCHARGES AND DEATHS IN HOSPITALS

Diseases.	Employees.											
	Discharges.						Deaths.					
	White.				Black.	White.				Black.		
	Ameri- cans.		Euro- peans.			Ameri- cans.		Euro- peans.				
	M.	F.	M.	F.		M.	F.	M.	F.		M.	F.
<i>Affections produced by external causes—Contd.</i>												
Absorption of deleterious gases (conflagration excepted).....					1							
Accidental drowning.....			1		2							
Traumatism by firearms.....												
Traumatism by cutting or piercing instruments.....	1				11							
Traumatism by fall.....	1				7							
Traumatism in mines and quarries.....					1							
Traumatism by machines.....					3						1	
Traumatism by other crushings (vehicles, railroads, landslides, etc.)....	1				3							
Railroad traumatism.....					1							
Traumatism by landslides.....					1							
Electricity (lightning excepted).....			1									
Fractures (cause not specified).....	3				7							
Dislocations.....					1							
Sprains.....	1											
Other external violence.....	9		3		44							
<i>Ill-defined diseases.</i>												
Infections of undetermined origin.....			1		4							
No disease.....		1			2							
Grand total.....	86	6	33		227	1					14	

## OF THE PANAMA CANAL FOR DECEMBER, 1916—Continued.

Nonemployees.										Nonresidents.								Total admissions.	Total deaths.
Discharges.					Deaths.					Discharges.				Deaths.					
White.			Black.		White.			Black.		White.		Black.		White.		Black.			
Sol-d'rs.	Others.				Sol-d'rs.	Others.													
M.	M.	F.	M.	F.	M.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
1																			
2	1		4							2									
										1									
1	2				1	1		1											
3				3															
7			4	5				1		1									
3		1	4	1								1							
2		9	1	4															
149	65	120	52	105	1	4	2	10	8	23	1	1	...	1	...	...	...		

TABLE VIII.—CONSOLIDATED

A=white Americans; F=

	Remaining Dec. 1.			Admitted.			Died.		
	A.	F.	B.	A.	F.	B.	A.	F.	B.
<b>ANCON HOSPITAL.</b>									
Panama Canal employees.....	25	10	113	73	23	171			11
Panama R. R. employees.....	7	3	43	6	5	42			1
Panama pay cases.....						1			
Other pay cases.....	84	23	65	238	30	101	3	2	7
Charity cases.....	8	2	26	26	3	25			4
Total.....	124	38	247	343	61	340	3	2	23
<i>Corozal Hospital (insane).</i>									
Panama Canal employees.....			6			1			1
Panama R. R. employees.....			1						
Panama pay cases.....	2	34	188		7	5		1	3
Other pay cases.....	5	4	2	1		3			2
Charity cases.....	3	10	63			2			1
Total.....	10	48	260	1	7	11		1	7
Grand total.....	134	86	507	344	68	351	3	3	30
<i>Corozal farm.</i>									
Panama Canal employees.....		10	55			3			
<i>Chronic ward.</i>									
Charity patients.....			24						
<b>COLON HOSPITAL.</b>									
Panama Canal employees.....	3	2	7	8	5	27			
Panama R. R. employees.....	6	3	12	7	1	26			1
Panama pay cases.....					2	13			1
Other pay cases.....	7	6		24	16	6	1	1	
Charity cases.....	2		1	2		2			
Total.....	18	11	20	41	24	74	1	1	2
<b>PALO SECO LEPER ASYLUM.</b>									
Panama pay cases.....		2	38			1			
Charity cases.....		2	24					1	
Total.....		4	62			1		1	
<b>GRAND TOTAL.</b>									
Panama Canal employees.....	28	22	181	81	28	202			12
Panama R. R. employees.....	13	6	56	13	6	68			2
Panama pay cases.....	2	36	226		9	20		1	4
Other pay cases.....	96	33	67	263	46	110	4	3	9
Charity cases.....	13	14	138	28	3	29		1	5
Total.....	152	111	668	385	92	429	4	5	32

Number of employees remaining in hospitals:

White..... 69

Black..... 259

Total..... 328



## HOSPITAL REPORT.

white foreign; B=blacks.

Discharged.			Transferred.			Remaining Dec. 31.			Average number constantly sick.			
A.	F.	B.	A.	F.	B.	A.	F.	B.	American.	Foreign.	Black.	Total.
69	20	142	-----	-----	1	29	13	130	30.71	16.16	123.10	169.97
7	4	32	-----	-----	-----	6	4	52	6.68	2.48	47.74	56.90
245	34	100	1	-----	3	73	17	56	90.09	18.77	56.36	165.22
22	5	23	-----	-----	1	12	-----	23	9.16	1.36	26.32	36.84
343	63	297	1	-----	5	120	34	262	136.64	38.77	253.91	429.32
-----	-----	-----	-----	-----	-----	-----	-----	6	-----	-----	6.23	6.23
-----	-----	-----	-----	-----	-----	-----	-----	1	-----	-----	1.00	1.00
-----	5	1	-----	-----	1	2	35	188	2.00	34.10	188.90	225.00
3	-----	1	-----	-----	-----	3	4	2	3.10	4.00	3.61	10.71
-----	-----	1	-----	-----	1	3	10	62	3.00	10.00	63.16	76.16
3	5	3	-----	-----	2	8	49	259	8.10	48.10	262.90	319.10
346	68	300	1	-----	7	128	83	521	144.74	86.87	516.81	748.42
-----	-----	4	-----	-----	-----	-----	10	54	-----	10.00	54.26	64.26
-----	-----	-----	-----	-----	-----	-----	-----	24	-----	-----	24.00	24.00
5	5	22	1	1	4	5	1	8	1.74	2.12	8.55	12.41
11	4	19	1	-----	10	1	-----	8	4.52	.83	7.81	13.16
-----	1	2	-----	1	9	-----	-----	1	-----	.22	1.48	1.70
23	10	2	2	4	3	5	7	1	7.06	8.00	.71	15.77
3	-----	2	-----	-----	1	1	-----	-----	1.03	-----	.35	1.38
42	20	47	4	6	27	12	8	18	14.35	11.17	18.90	44.42
-----	-----	-----	-----	-----	-----	-----	2	39	-----	2.00	38.67	40.67
-----	-----	-----	-----	-----	-----	-----	1	24	-----	1.84	24.00	25.84
-----	-----	-----	-----	-----	-----	-----	3	63	-----	3.84	62.67	66.51
74	25	168	1	1	5	34	24	198	32.45	28.28	192.14	252.87
18	8	51	1	-----	10	7	4	61	11.20	3.31	56.55	71.06
-----	6	3	-----	1	10	2	37	229	2.00	36.32	229.44	267.76
271	44	103	3	4	6	81	28	59	100.25	30.77	60.68	191.70
25	5	26	-----	-----	3	16	11	133	13.19	13.20	137.83	164.22
388	88	351	5	6	34	140	104	680	159.09	111.88	676.64	947.61

TABLE IX.—CONSOLIDATED DISPENSARY REPORT.

## EMPLOYEES TREATED IN QUARTERS.

	Remain- ing Dec. 1.		Admit- ted.		Died.		Dis- charged.		Trans- ferred.		Remain- ing Dec. 1.		Days lost.		
	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	Total.
Ancon.....	1	.....	110	.....	.....	.....	111	.....	.....	.....	.....	.....	175	.....	175
Balboa.....	4	1	127	14	.....	.....	123	9	3	6	5	.....	295	30	325
Paraiso.....	.....	.....	7	7	.....	.....	6	6	.....	.....	1	1	38	13	51
Pedro Mi- guel.....	1	1	10	.....	.....	.....	11	1	.....	.....	.....	.....	17	3	20
Gatun.....	3	.....	10	7	.....	.....	12	4	.....	.....	1	3	35	38	73
Colon.....	4	20	92	186	.....	.....	94	189	.....	.....	2	17	164	574	738
Total.	13	22	356	214	.....	.....	357	209	3	6	9	21	724	658	1,382

## ALL CASES TREATED BUT NOT EXCUSED.

	Employees.			Nonemployees.			Totals.		
	W.	B.	Total.	W.	B.	Total.	W.	B.	Total.
Ancon.....	2,972	4,664	7,636	2,094	3,241	5,335	5,066	7,905	12,971
Balboa.....	3,302	3,929	7,231	2,465	465	2,930	5,767	4,394	10,161
Paraiso.....	835	2,603	3,438	684	698	1,382	1,519	3,301	4,820
Pedro Miguel..	1,231	2,369	3,600	717	392	1,109	1,948	2,761	4,709
Gamboa.....	62	252	314	15	205	220	77	457	534
Gatun.....	458	1,032	1,490	530	927	1,457	988	1,959	2,947
Colon.....	1,304	3,808	5,112	1,198	805	2,003	2,502	4,613	7,115
Total.....	10,164	18,657	28,821	7,703	6,733	14,436	17,867	25,390	43,257

TABLE IX-A.—CONSOLIDATED ADMISSION REPORT.

	White.	Black.	Total.
Total admissions to hospitals, excluding Corozal farm and chronic ward.....	477	426	903
Total admissions of employees to quarters.....	356	214	570
Total.....	833	640	1,473
Less number of patients transferred between hospitals and from quarters to hospitals, whose admissions are duplicated in above figures.....	14	40	54
Net admissions to hospitals and quarters.....	819	600	1,419
EMPLOYEES.			
Employees admitted to hospitals.....	128	267	395
Employees admitted to quarters.....	356	214	570
Total.....	484	481	965
Less number transferred between hospitals and from quarters to hospitals, whose admissions are duplicated in above figures.....	6	21	27
Net admissions of employees to hospitals and quarters.....	478	460	938
Annual average per thousand of admissions of employees to hospitals and quarters.....	1,212.68	186.50	327.91

TABLE IX-B.—CONTAGIOUS AND INFECTIOUS DISEASES REPORTED DURING THE MONTH.

Disease.	Panama.	Colon.	Canal Zone.	Total.
Beriberi.....	1			1
Chickenpox.....	7	1	7	15
Diarrhea.....			7	7
Diphtheria.....	1		4	5
Dysentery.....	4		3	7
Epidemic cerebrospinal meningitis.....			1	1
Malarial fever.....	19	8	23	50
Measles.....	2			2
Meningitis.....	1			1
Pellagra.....	2			2
Pneumonia.....	3	2	4	9
Polio-myelitis.....			2	2
Tetanus.....	1			1
Tuberculosis (various organs).....	22	5	6	33
Typhoid fever.....		1	1	2
Whooping cough.....		7		7

TABLE X.—NUMBER OF EMPLOYEES CONSTANTLY SICK IN HOSPITALS AND QUARTERS.

	White.	Colored.	Total.
Hospitals:			
Ancon Hospital.....	56.03	178.07	234.10
Colon Hospital.....	9.21	16.36	25.57
Total.....	65.24	194.43	259.67
Quarters:			
Ancon.....	5.64		5.64
Balboa.....	9.52	.97	10.49
Pedro Miguel.....	.55	.10	.65
Paraiso.....	1.22	.42	1.64
Gatun.....	1.13	1.23	2.36
Colon.....	5.29	18.52	23.81
Total.....	23.35	21.24	44.59

  

	Hospitals.	Quarters.	Total
Average number of employees constantly sick:			
White.....	65.24	23.35	88.59
Colored.....	194.43	21.24	215.67
Total.....	259.67	44.59	304.26
Average number of employees constantly sick per 1,000:			
White.....	13.79	4.94	18.73
Colored.....	6.57	.72	7.29
Total.....	7.56	1.30	8.86

TABLE XI.—AVERAGE LENGTH OF STAY IN HOSPITALS OR QUARTERS FOR EACH ADMISSION OF SICK EMPLOYEE.

	White.	Black.	Total.
Hospitals:			
Ancon Hospital.....	15.54	23.09	20.47
Colon Hospital.....	11.04	8.71	9.48
Quarters:			
Ancon.....	1.64		1.64
Balboa.....	2.07	2.13	2.08
Pedro Miguel.....	1.90	6.00	2.25
Paraiso.....	6.33	2.17	4.25
Gamboa.....			
Gatun.....	3.16	9.50	4.75
Colon.....	2.12	3.68	3.17

TABLE XII.—FINANCIAL STATEMENT, DEPARTMENT OF HEALTH.

	Nov., 1916.	Oct., 1916.	Nov., 1915.
Administration: Chief health office .....	\$1,232.84	\$407.18	\$399.31
Hospital division:			
Ancon Hospital .....	27,023.94	27,815.06	24,654.26
Board of health laboratory .....	1,756.06	2,002.90	1,275.89
Corozal farm .....	6,587.30	7,422.24	6,475.76
Chronic ward .....	225.16	209.80	215.99
Colon Hospital .....	4,378.52	4,569.75	3,785.58
Palo Seco Leper Asylum .....	1,627.35	1,482.59	1,125.30
Santo Tomas Hospital .....	865.00	1,047.00	1,223.66
Medical storehouse .....	698.68	637.33	1,153.70
Reserve for new tools .....	2,176.75	2,159.04	
Vacation pay .....	2,743.69		
Total hospital .....	48,082.45	47,345.71	39,910.14
District dentists .....	27.08	27.08	3.33
Dispensaries:			
Balboa .....	1,173.60	1,116.10	1,167.51
Corozal .....			466.41
Pedro Miguel .....	394.51	420.12	458.42
Paraiso .....	465.42	547.75	661.72
Gamboa .....	131.75	137.63	140.16
Gatun .....	438.40	509.28	706.16
Total .....	2,630.76	2,787.96	3,633.71
Sanitary Division:			
General inspector .....	50.00	50.00	50.00
Health office, Panama .....	3,549.60	3,599.92	4,002.50
Street cleaning, Panama .....	3,870.82	3,911.03	4,287.88
Health office, Colon .....	2,676.67	2,477.25	3,940.36
Street cleaning, Colon .....	2,040.94	2,126.02	2,057.50
Zone sanitation—			
Ancon .....	1,186.10	1,621.77	1,726.58
Balboa .....	633.93	723.33	1,560.94
Corozal .....	<sup>1</sup> 206.04	1,213.43	1,373.92
Pedro Miguel .....	<sup>1</sup> 2,077.98	2,994.36	2,871.18
Frijoles .....	71.45	72.27	103.06
Gatun .....	<sup>1</sup> 1,242.21	2,950.03	3,452.82
Cristobal-Mt. Hope .....	1,596.75	1,904.65	2,618.00
Total .....	12,150.03	23,644.06	28,044.74
Quarantine division:			
Chief quarantine office .....	157.53	169.08	382.40
Balboa-Panama .....	1,742.07	1,977.76	2,128.02
Colon-Cristobal .....	2,479.64	2,810.30	3,343.94
Inspection of cattle .....	693.64	497.50	
Total .....	5,072.88	5,454.64	5,854.36
RECAPITULATION.			
Chief health office .....	1,232.84	408.18	399.31
Hospital division .....	48,082.45	47,345.71	39,910.14
Dispensaries .....	2,630.76	2,787.96	3,633.71
Sanitary division .....	12,150.03	23,644.06	28,044.74
Quarantine division .....	5,072.88	5,454.64	5,854.36
Total .....	69,168.96	79,639.55	77,842.26

<sup>1</sup> Items charged to construction allotments that had previously been charged to Zone Sanitation.

TABLE XIII.—ANCON HOSPITAL.  
REPORT OF NATIONALITY OF PATIENTS TREATED.

	Total num- ber treated.	American.		Other nations.	
		White.	Black.	White.	Black.
Hospital:					
Panama Canal employees.....	415	98	1	33	283
Panama R. R. employees.....	106	13	.....	8	85
Panama Government pay patients.	1	.....	.....	.....	1
Other pay cases.....	541	322	.....	53	166
Charity patients.....	90	34	.....	5	51
Totals.....	1,153	467	1	99	586
Asylum:					
Panama Canal employees.....	7	.....	.....	.....	7
Panama R. R. employees.....	1	.....	.....	.....	1
Panama Government pay patients.	236	2	.....	41	193
Other pay cases.....	15	6	.....	4	5
Charity patients.....	78	3	.....	10	65
Totals.....	337	11	.....	55	271
Grand totals.....	1,490	478	1	154	857
Soldiers.....	201	201	.....	.....	.....
Chronics.....	24	.....	.....	.....	24
Farm (cripples).....	68	.....	.....	10	58

REPORT OF DAYS LOST IN HOSPITAL.

Hospital:					
Panama Canal employees.....	5,269	952	31	501	3,785
Panama R. R. employees.....	1,764	207	.....	77	1,480
Panama Government pay patients.	12	.....	.....	.....	12
Other pay cases.....	5,122	2,793	.....	582	1,747
Charity patients.....	1,142	284	.....	42	816
Totals.....	13,309	4,236	31	1,202	7,840
Asylum:					
Panama Canal employees.....	193	.....	.....	.....	193
Panama R. R. employees.....	31	.....	.....	.....	31
Panama Government pay patients.	6,975	62	.....	1,057	5,856
Other pay cases.....	332	96	.....	124	112
Charity patients.....	2,361	93	.....	310	1,958
Totals.....	9,892	251	.....	1,491	8,150
Grand totals.....	23,201	4,487	31	2,693	15,990
Soldiers.....	2,087	2,087	.....	.....	.....
Chronics.....	744	.....	.....	.....	744
Farm (cripples).....	1,992	.....	.....	310	1,682

Average cost per subsistence per day, \$0.3173.

TABLE XIII.—ANCON HOSPITAL—Continued.

## WARD LABORATORY REPORT.

Blood examinations (total number).....	603
Estivoauttumnal.....	19
Tertian.....	7
Differential counts.....	12
Hemoglobelin estimations.....	209
Leucocyte counts.....	78
Red blood counts.....	19
Stool examinations (total number).....	448
Ameba.....	2
Ascaris lumbricoides.....	4
Bilharzia.....	1
Guaiac tests.....	22
Pus and blood.....	35
Stronglides.....	16
Tenia saginata dispar (ova).....	2
Tricocephalus dispar.....	10
Uncinaria (ova).....	19
Urine examinations (total number).....	1,836
Albumen.....	478
Bile.....	7
Casts.....	374
Ciliated monads.....	2
Epitholia.....	1,057
Guaiac tests.....	118
Indicon.....	106
Pus.....	744
Pus and blood.....	200
Sugar (pos. 1, neg. 135).....	136
Trichomonas vaginalis.....	1
Sputum examinations (total number).....	262
Positive for tubercle bacilli.....	27
Smear examinations (total number).....	31
Urethral.....	12
Vaginal.....	4
Spinal fluid.....	5
Fluid from knee.....	1

## REPORT OF SURGICAL OPERATIONS.

	Number.	Died.
Amputations:		
Digits, multiple.....	1	.....
Operations on bones:		
Osteotomy.....	3	.....
Plating of fractures, single.....	2	.....
Plating of fractures, compound.....	2	.....
Adenectomy:		
Cervical.....	3	.....
Inguinal, single.....	11	.....
Inguinal, double.....	7	.....
Femoral.....	1	.....
Herniotomy:		
Inguinal, single.....	10	.....
Inguinal, double.....	1	.....
Ventral.....	1	.....
Genito-urinary tract:		
Nephrotomy.....	1	.....
Nephrectomy.....	1	.....
Varicocele, radical cure.....	2	.....
Hydrocele, single, radical cure.....	2	.....
Orchidectomy.....	1	.....
Epididymotomy.....	12	.....
Curetage uteri.....	9	.....
Perineoplasty.....	2	.....
Trachelorrhaphy.....	2	.....

TABLE XIII.—ANCON HOSPITAL—Continued.  
REPORT OF SURGICAL OPERATIONS—Continued.

	Number.	Died.
Obstetrical:		
High forceps.....	1	.....
Low forceps.....	1	.....
Version.....	3	.....
Rectum:		
Hemorrhoids, radical cure.....	15	1
Fistula in ano, excision of.....	1	.....
General:		
Thyroidectomy.....	2	.....
Varicose veins, excision of.....	1	.....
Tenorrhaphy.....	1	.....
Excision of surface neoplasms.....	1	.....
Plastic operation for congenital defect.....	1	.....
Plastic operation for severe injuries.....	1	.....
Plastic operation for effects of disease.....	3	.....
Laparotomy:		
For intestinal obstruction.....	1	.....
Exploratory.....	4	.....
Gastroenterostomy.....	1	1
Appendectomy.....	9	.....
Appendectomy with local peritonitis.....	1	.....
Abscess of liver, laparo-hepatotomy for.....	1	.....
Supravaginal hysterectomy.....	6	.....
Hysteromyomectomy.....	2	.....
Salpingo-oophorectomy.....	2	.....
Ovarian cystectomy.....	3	.....
Suspensio-uteri.....	5	.....
Plastic operation for chronic pelvic peritonitis.....	1	.....
For ectopic gestation.....	1	.....
Major operations, various other.....	3	1
Minor operations, various.....	156	.....
Total.....	301	3

REPORT OF OPERATIONS, EYE AND EAR CLINIC.

Tonsillectomy and adenoidectomy.....	6
Tonsillectomy only.....	10
Adenoidectomy only.....	18
Submucous resections.....	15
Turbinectomy.....	5
Abscess mastoid region.....	1
Perforation right antrum.....	1
Trephine Fergus Elliott.....	1
Trephine of sclera for chronic glaucoma.....	1
Minor eye.....	7
Total.....	65
Refractions.....	136

REPORT OF OUT-PATIENT DEPARTMENT.

Clinic.	Total visits.	New cases.	Pay cases.	Prescriptions.
Medical.....	313	212	23	266
Surgical.....	241	126	7	49
Eye and ear.....	516	229	.....	29
Total.....	1,070	567	30	344



## TABLE XIII.—ANCON HOSPITAL—Continued.

## MONTHLY REPORT OF VACCINATIONS.

Number of adults vaccinated.....	726
Number of takes.....	199
Number of school children vaccinated.....	7
Number of takes.....	2

## BOARD OF HEALTH LABORATORY.

Bacteriological examination of—	
Blood cultures (2 pos. for B. typhosus; 1 pos. for B. coli.).....	16
Throat cultures (2 pos. for B. diphtheriae, both for release).....	64
Urines.....	63
Stools.....	68
Sputum.....	4
Pathological fluids, exudates, etc.....	15
Smears, gonococcus.....	1
Smears from a cutaneous sore.....	1
Cultures of autopsies.....	1
Leper suspects.....	2
Oysters (consignments).....	1
Dairy milk from Corozal.....	30
Dairy milk from Panama.....	9
Cheese.....	1
Wassermann reactions.....	753
Agglutination reactions.....	1
Anti-typhoid vaccinations.....	2
Smallpox vaccinations.....	1
Animal inoculations.....	10
Dark field examinations.....	8
Chemical examinations of:	
Mother's milk.....	6
Urines.....	8
Dairy milk from Panama.....	27
Fat determinations of milk from Corozal farm.....	4
Skimmed milk (canned).....	1
Gastric contents.....	1
Powder for cocaine.....	4
"Service Beer" (near beer).....	1
Resin.....	1
Gasoline.....	1
Butter.....	1
Cider.....	2
Spinal fluids—	
Butyric acid test.....	9
Ammonium sulphate test.....	9
Phenol test.....	9
Colloidal gold test.....	4
Pathological tissues prepared (paraffin 292, frozen 9).....	311
Surgical tissues reported.....	42
Placental smears.....	33
Blood films from horses.....	5
Autopsies performed <sup>1</sup> .....	36
Foetus inspections.....	4
Animals autopsied (cattle 27, hogs 3, guinea pigs 5, cats 2, dogs 1).....	38
Animals under observation (calves 2, dogs 1).....	3
Bodies embalmed.....	4
Interments at Corozal.....	20
Taken to Panama.....	3
Cremations.....	28

<sup>1</sup> A total of 54 bodies passed through the morgue during the month. Five of these were "still-births." Thirteen bodies were not autopsied (embalming required in most of these cases). The percentage autopsied for the month was 73.46 per cent.

TABLE XIII.—ANCON HOSPITAL—Continued.  
 MOSQUITOES IDENTIFIED AT THE BOARD OF HEALTH LABORATORY.

Stations.	<i>Anopheles albimanus.</i>	<i>Anopheles tarsimaculata.</i>	<i>Anopheles malefactor.</i>	<i>Anoph. pseudopunctipennis.</i>	<i>Anoph. apicimacula.</i>	<i>Mansonia titillans.</i>	<i>Mansonia fasciolatus.</i>	<i>Mansonia nigricans.</i>
Ancon.....						1		
Balboa.....	91					44		
Corozal post....	98					12		
Corozal district.....	61		1			20		
Pedro Miguel.....	13					288		
Pedro Miguel railroad station.....	18			2		1,003		
Pedro Miguel, west side of lock.....	58		1	3		635		
Paraiso.....	8		1	2		197		
Red tank.....	3					35		
Miraflores.....	1					6		
Río Grande.....						699		
Lirio & Cerio.....				1		775		
Dredges, Culebra Cut.....	5			1		482		
Gamboa.....	16		3			3,534		1
Gatun.....	116		3		1	133	50	
New Gatun.....	136	1	11		3	139	54	
Frijoles.....	525	3	4			9,591	1	
Monte Lirio.....	79	2				1,306	37	23
Barracks, Cristobal.....	47	10	1			2		
Silver Married Quarters.....	2							
Mount Hope village.....	14		2			1	1	
Pennsylvania R. R. cars, Cristobal.....	6		3			1		
Colon Hospital.....	3					25	12	1
Other place in Colon, Cristobal district.....	3		2			4		
Camp Gaillard.....						3,735	1	
Empire.....						712		
Camp Otis.....	1		1			4,008	1	
Fort Randolph.....	11	1						
Fort Sherman.....	18		5			144		
Fort Grant.....								
Total.....	1,333	17	38	8	4	27,532	167	25

TABLE XIII.—ANCON HOSPITAL—Continued.

MOSQUITOES IDENTIFIED AT THE BOARD OF HEALTH LABORATORY—Continued.

Stations.	Stegomyia.	Culex and allied genera.	Wyeomyia.	Aedes taeniorhynchus.	Aedeomyia squamipennis.	Lesticocampa.	Lutzia allostigma.	Total.
Ancon.....	4	310	.....	.....	.....	.....	.....	315
Balboa.....	.....	208	.....	.....	.....	.....	.....	343
Corozal post.....	.....	12	4	.....	.....	.....	.....	126
Corozal district.....	1	.....	2	.....	.....	.....	.....	85
Pedro Miguel.....	.....	7	.....	.....	1	.....	.....	309
Pedro Miguel railroad station.....	.....	2	.....	.....	.....	.....	.....	1,025
Pedro Miguel, west side of lock.....	.....	14	1	.....	1	.....	.....	713
Paraiso.....	1	136	.....	.....	1	.....	.....	346
Red tank.....	.....	.....	.....	.....	.....	.....	.....	38
Miraflores.....	.....	.....	.....	.....	.....	.....	.....	7
Rio Grande.....	.....	.....	.....	.....	.....	.....	.....	699
Lirio & Cerio.....	.....	.....	.....	.....	.....	.....	.....	775
Dredges, Culebra Cut.....	5	2,232	3	.....	.....	.....	.....	2,728
Gamboa.....	.....	3	.....	.....	.....	.....	.....	3,557
Gatun.....	.....	95	12	.....	4	.....	.....	424
New Gatun.....	.....	28	7	.....	.....	.....	.....	379
Frijoles.....	.....	4	8	.....	.....	1	.....	10,137
Monte Lirio.....	.....	3	4	.....	.....	.....	.....	1,454
Barracks, Cristobal.....	.....	3,692	4	.....	.....	.....	.....	3,756
Silver Married Quarters.....	.....	326	.....	.....	.....	.....	.....	328
Mount Hope village.....	.....	13	.....	.....	.....	.....	.....	31
Philadelphia R. R. cars, Cristobal.....	.....	65	.....	.....	.....	.....	.....	75
Colon Hospital.....	.....	20	2	.....	.....	.....	.....	63
Other place in Colon, Cristobal district.....	6	11	.....	.....	.....	.....	.....	26
Camp Gaillard.....	.....	102	40	.....	16	1	.....	3,895
Empire.....	.....	3	11	.....	3	.....	.....	729
Camp Otis.....	.....	1	8	.....	2	1	.....	4,023
Fort Randolph.....	.....	.....	.....	.....	.....	.....	.....	12
Fort Sherman.....	.....	24	.....	.....	.....	.....	.....	191
Fort Grant.....	.....	82	12	.....	.....	.....	.....	94
Total.....	17	7,393	106	12	2	27	2	36,683

TABLE XIII.—ANCON HOSPITAL—Continued.

*Corozal Hospital.*

## STATEMENT OF COMMITMENTS, DISCHARGES, AND DEATHS.

## COMMITMENTS.

	Male.	Female.
From Canal Zone, first admission.....	4	3
From Panama Government, first admission.....	9	3
Total.....	13	6

## DISCHARGES.

	Well.		Improved.		Unimproved.*	
	Male.	Female.	Male.	Female.	Male.	Female.
Barbados.....			1			
Germany.....				1		
Guadeloupe.....						(T) 1
Jamaica.....			(T) 1	2		
Panama.....	1		2			1
Russia.....					(D) 1	
United States.....			(D) 1		(D) 1	
Total.....	1		5	3	2	2

NOTE.—(T) Two transferred Ancon Hospital for surgical treatment; (D) three soldiers deported to United States.

## DEATHS.

Medical diagnosis.	Mental diagnosis.	Male.	Female.
Purulent infection and septicemia; syphilis; pellagra; tuberculosis.	Pellagra; syphilis.....	1	
Duodenal ulcer; syphilis, tertiary...	Syphilis.....	1	
Pellagra.....	Syphilis; pellagra.....		1
Asphyxia; alcoholic psychosis.....	Toxic psychosis.....	1	
Syphilis, tertiary; nephritis; acute arsenical poisoning.	Syphilis.....		1
Pellagra.....	Toxic psychosis; pellagra.....		1
General paralysis of insane; syphilis, tertiary.	General paralysis of the insane.	1	
Softening of the brain; organic disease of the heart.	Dementia precox.....	1	

TABLE XIV.—COLON HOSPITAL.

## NATIONALITY.

	White American.	White foreign.	Black.	Total.
Panama Canal employees.....	11	7	34	52
Panama R. R. employees.....	13	4	38	55
Panama pay.....		2	13	15
Other pay.....	31	22	6	59
Charity cases.....	4		3	7
Total.....	59	35	94	188

## LABORATORY REPORT.

Blood examinations.....	44
Estivo-autumnal.....	7
Tertian.....	2
Haemoglobin estimations.....	8
White-blood counts.....	12
Red-blood counts.....	5
Stool examinations.....	25
Urine examinations.....	166
Albumen.....	46
Casts.....	38
Blood cells and pus.....	20
Sugar and pus.....	2
Negative for albumen and sugar.....	118
Sputum examinations.....	30

## SURGICAL OPERATIONS.

Operations on bones:	
Ostectomy.....	2
Herniotomy:	
Inguinal, single.....	2
Inguinal, double.....	3
Genito-urinary tract:	
Varicocele, radical cure.....	1
Hydrocele, single, radical cure.....	1
Curetage uteri.....	7
Trachelorrhaphy.....	2
Rectum:	
Hemorrhoids, radical cure.....	2
General:	
Excision of surface neoplasms.....	1
Extensive injuries to soft parts, operation for.....	4
Laparotomy:	
Appendectomy.....	8
Appendectomy with local peritonitis.....	1
Salpingo-oophorectomy.....	1
Ovarian cystectomy.....	1
Suspensio-uteri.....	2
Rupture small and large intestine and mesentery.....	1
Minor operations, various.....	16
Deliveries.....	4
Minor operations, various (dispensary).....	176

<sup>1</sup> Died.

TABLE XV.—PALO SECO LEPER ASYLUM.  
NATIONALITY OF PATIENTS.

Class.	Number treated		Americans.		Others.	
	White.	Black.	White.	Black.	White.	Black.
Panama pay patients.....	2	39	.....	.....	2	39
Charity patients.....	2	24	.....	.....	2	24
Total.....	4	63	.....	.....	4	63

Cost of subsistence per patient per d y, \$0.28.

TABLE XVI.—SANTO TOMAS HOSPITAL.

Class.	Remain- ing Dec. 1	Admit- ted.	Dis- charged.	Died.	Remain- ing Dec 3.
Pay cases.....	28	81	91	3	15
Charity cases.....	430	841	774	81	416
Total.....	458	922	865	84	431

Average number of patients constantly sick..... 440  
 Total number of days treatment..... 13,637  
 Average number of days treatment for each patient..... 9  
 Cost of subsistence per patient per day..... \$0.39

NATIONALITY OF PATIENTS.

Class.	Number treated.	American.		Other nations.	
		White.	Black.	White.	Black.
Pay cases.....	109	3	8	42	56
Charity cases.....	1,271	.....	.....	126	1,145
Total.....	1,380	3	8	168	1,201

DISPENSARY REPORT.

Class.	White.	Black.	Total.
Natives.....	23	634	657
Foreigners.....	38	281	319
Total.....	61	915	976

TABLE XVI.—SANTO TOMAS HOSPITAL—Continued.  
DISEASES TREATED.

Typhoid fever.....	1
Malaria.....	55
Measles.....	2
Influenza.....	2
Dysentery.....	4
Leprosy.....	1
Other epidemic diseases.....	8
Purulent infection and septicemia.....	9
Tetanus.....	1
Pellagra.....	4
Beriberi.....	1
Tuberculosis of the lungs.....	14
Acute miliary tuberculosis.....	1
Tuberculous meningitis.....	1
Pott's disease.....	1
Tuberculosis of other organs.....	1
Syphilis.....	42
Soft chancre.....	29
Gonococcus infection.....	28
Cancer and other malignant tumors of the female genital organs.....	6
Cancer and other malignant tumors of other organs and of organs not specified.....	2
Diabetes.....	1
Leuchæmia.....	1
Alcoholism (acute or chronic).....	16
Paralysis without specified cause.....	1
Other forms of mental alienation.....	7
Epilepsy.....	5
Follicular conjunctivitis.....	1
Neuralgia and neuritis.....	13
Other diseases of the nervous system.....	1
Other diseases of the eyes and their annexa.....	10
Diseases of the ear.....	2
Organic diseases of the heart.....	12
Angina pectoris.....	1
Diseases of the arteries.....	6
Diseases of the veins.....	9
Diseases of the lymphatic system.....	6
Hemorrhage.....	1
Diseases of the nasal fossæ.....	1
Diseases of thyroid body.....	2
Acute bronchitis.....	1
Chronic bronchitis.....	11
Broncho pneumonia.....	1
Pneumonia.....	8
Pleurisy.....	9
Other diseases of the mouth and annexa.....	1
Diseases of the pharynx.....	22
Ulcer of the stomach.....	1
Other diseases of the stomach.....	1
Diarrhea and enteritis (under 2 years).....	8
Diarrhea and enteritis (2 years and over).....	17
Ankylostomiasis.....	40
Intestinal parasites.....	7
Appendicitis and typhlitis.....	11
Hernia, intestinal obstructions.....	18
Diseases of the anus and fecal fistula.....	5
Other diseases of the intestines.....	4
Other diseases of the liver.....	2
Simple peritonitis.....	3
Bright's disease.....	17
Other diseases of the kidneys and annexa.....	1
Diseases of the bladder.....	3
Diseases of the urethra.....	8
Nonvenereal diseases of the female genital organs.....	13
Uterine tumor.....	1
Metritis.....	9
Other diseases of the uterus.....	3
Salpingitis and other diseases of the female genital organs.....	12
Nonpuerperal diseases of the breast.....	1

TABLE XVI.—SANTO TOMAS HOSPITAL—Continued.

## DISEASES TREATED—Continued.

Normal labor.....	89
Accidents of pregnancy.....	18
Puerperal septicemia.....	1
Gangrene.....	2
Furuncle.....	1
Acute abscess.....	10
Other diseases of the skin.....	29
Diseases of the bones.....	8
Diseases of the joints.....	11
Congenital malformation.....	1
Nursling discharged from hospital without disease.....	74
Senility.....	4
Other acute poisonings.....	2
Burns.....	2
Traumatism by firearms.....	1
Traumatism by other crushings.....	5
Traumatism by animals.....	1
Dislocations.....	1
Sprains.....	2
Fractures.....	11
Other external violence.....	25
No disease.....	19
Total discharges.....	865
Deaths.....	84
Remaining.....	431
Total treated.....	1,380

## SURGICAL OPERATIONS.

	Number.	Died.
Amputation digits, multiple.....	5	
Ostectomy.....	1	
Adenectomy, cervical.....	2	
Adenectomy, inguinal, single.....	3	
Adenectomy, inguinal, double.....	1	
Herniotomy, inguinal, single.....	11	1
Herniotomy, inguinal, double.....	2	
Herniotomy, ventral.....	1	
Urethrotomy, external.....	2	
Hydrocele, single, radical cure.....	1	
Hydrocele, double, radical cure.....	1	
Orchidectomy.....	5	
Epididymotomy.....	2	
Amputation of penis.....	1	
Curetage uteri.....	4	
Vaginal punctures.....	2	
Hemorrhoids, radical cure.....	9	
Fistula in anus, excision of.....	1	
Prolapsus of rectum, radical excision.....	1	
Excision of surface neoplasm.....	5	
Gunshot wound of soft parts, operation for.....	3	
Plastic operations for severe injuries.....	2	
Skin graft.....	14	
Laparotomy for intestinal obstructions.....	2	1
Appendectomy.....	8	1
Cholecystectomy.....	1	
Supravaginal hysterectomy.....	1	
Salpingectomy, single.....	1	
Salpingectomy, double.....	4	
Salpingo-oophorectomy.....	4	
Suspensio-uteri.....	2	
Stab wound of abdomen.....	1	1
Major operations, various other.....	5	
Minor operations, various other.....	33	
Total.....	141	4



TABLE XVII.—SUMMARY OF SANITARY WORK PERFORMED AND MATERIAL EXPENDED DURING THE MONTH OF NOVEMBER IN THE CANAL ZONE.

Work requests on supply department:	
Grass cutting.....	30
Screening.....	8
Miscellaneous.....	10
Work requests on municipal engineering division.....	15
Work requests on dredging division.....	1
Pit closets inspected.....	798
Buildings inspected:	
For screening.....	1,586
For mosquitoes.....	5,015
For general sanitation.....	2,191
Stores, inspections of.....	24
Restaurants, inspections of.....	14
Shops, inspections of.....	76
Closets disinfected.....	821
Garbage cans emptied.....	2,804
Houses disinfected or fumigated.....	5
Rat traps in use.....	400
Rats destroyed.....	357
Number of mosquitoes destroyed in dwellings:	
Anopheles.....	1,086
Stegomyia.....	36
Culex.....	4,039
Mansonia.....	22,999
Material expended:	
Larvacide, gallons.....	264
Crude oil, gallons.....	13,148
Kerosene, gallons.....	569
Fly-breeding places destroyed.....	1

REPORT OF ROUTINE WORK DONE BY HEALTH OFFICE, PANAMA.

General sanitation:	
Lineal feet of ditches cleaned and maintained.....	71,140
Lineal feet of new ditches dug.....	0
Number of cubic yards of earth used in filling.....	0
Gallons of larvacide used.....	440
Gallons of crude oil used.....	4,595
Gallons of kerosene used.....	215
Square yards of pools oiled.....	362,150
Water containers treated.....	13,401
Mosquito breeding places found (Stegomyia 108).....	253
Fly breeding places found.....	59
Flies trapped (13,000 per quart).....	64
Number of rats killed.....	1,145
Number of room disinfections made.....	15
Square feet of vegetation removed.....	178,000
Garbage collection:	
Number of loads of garbage removed to dump.....	4,507
Number of cubic yards of garbage removed to dump.....	9,774
Total number of cans of garbage emptied.....	43,421
Buildings:	
Number of buildings inspected.....	4,847
Number of plans for new buildings approved.....	14
Number of permits issued for repairs to old buildings.....	99
Total building permits issued.....	113
Number of buildings condemned.....	6
Number of stables condemned.....	0
Number of buildings demolished.....	1
Street cleaning:	
Average number of square yards of streets cleaned daily.....	600,000
Average number of square yards of streets sprinkled daily.....	0
Number of private properties cleaned during month.....	4
Number of nuisance notices served and nuisances abated.....	305
Vaccinations:	
Number of vaccinations performed during month.....	125
Total number of vaccinations since April 1, 1914.....	25,193

## MONTHLY WORK REPORT FOR COLON-CRISTOBAL-MOUNT HOPE.

<b>Sanitation, Colon-Cristobal:</b>	
Square yards street cleaned.....	4,050,652
Square yards street sprinkled.....	217,600
Square yards alleys maintained.....	676,000
Number of private properties cleaned.....	759
Cubic feet fumigated.....	0
Doses of quinine issued.....	0
Number of dogs caught.....	0
Number of dogs killed.....	0
Number of rats caught.....	481
Loads of yard garbage disposed of.....	614
Number of cans of garbage (cubic yards, 2,731).....	67,813
Colon dump maintained.....	
Linear yards of ditches constructed.....	500
Linear yards of ditches maintained.....	1,642
Acres of vegetation removed:	
Quarantine station.....	10
Cristobal (Panama R. R. reservation).....	15
Washington Hotel.....	0
Colon Hospital.....	0
Panama R. R. reservation, Colon swamp.....	30
Parkway and E. Street maintained.....	
Square yards oiled.....	70,460
Number of receptacles treated.....	36,700
Number of mosquitoes caught in Colon Hospital screens—	
Anopheles.....	11
Culex.....	264
Number of mosquito-breeding places destroyed.....	0
Number of fly-breeding places destroyed.....	2
Number of buildings inspected.....	12,548
Number of gallons of larvacide used in Colon.....	103.20
Number of gallons of crude oil used in Colon.....	1,025
Number of nuisances abated.....	505
<b>Building, Colon:</b>	
Number of building plans approved.....	4
Number of permits to occupy issued.....	14
Number of permits to repair issued.....	42
Number of bills collected.....	111
<b>Sewers, Colon:</b>	
Number of new connections made during the month.....	7
Total number of connections made to date.....	1,368
Number of houses on which connections were made.....	7
Outstanding permits.....	30
<b>Sanitation, Cristobal:</b>	
Number of cans garbage (cubic yards, 745).....	14,541
Loads of yard garbage handled.....	211
Square yards oiled.....	19,400
Number of receptacles treated.....	4,350
Number of mosquito-breeding places destroyed.....	0
Number of fly-breeding places destroyed.....	0
Gallons of larvacide used.....	22
Gallons of crude oil used.....	475
Number of buildings inspected.....	2,355
Number of nuisances abated.....	42
<b>Sanitation, Mount Hope:</b>	
Number of cans garbage (cubic yards, 110).....	962
Square yards oiled.....	92,500
Number of doses of quinine issued.....	668
Number of receptacles treated.....	8,450
Number of mosquito-breeding places destroyed.....	62
<b>Number of mosquitoes caught—</b>	
Anopheles—	
Barracks.....	70
Silver married quarters.....	1
Steamships.....	0
Mount Hope village.....	19
Camp Beird cars.....	0
Total.....	90

## MONTHLY WORK REPORT FOR COLON-CRISTOBAL-MOUNT HOPE—Continued.

## Sanitation, Mount Hope—Continued.

## Number of mosquitoes caught—Continued.

Culex—	
Barracks.....	4,242
Silver married quarters.....	161
Steamships.....	22
Mount Hope village.....	17
Camp Beird cars.....	0
Total.....	4,442
Gallons of larvacide used.....	200
Gallons of crude oil used.....	90
Mount Hope cemetery maintained.....	
Linear yards ditches constructed.....	326
Linear yards ditches maintained.....	3,940
Square yards of vegetation removed.....	170,055
Number of burials during the month.....	49

TABLE XVIII.—CONSOLIDATED REPORT OF QUARANTINE TRANSACTIONS AT THE PORTS OF BALBOA-PANAMA AND COLON-CRISTOBAL.

Number of vessels inspected and passed.....	214
Number of vessels passed on certificate of medical officer.....	3
Number of vessels held in quarantine.....	13
Total number of vessels entered.....	230
Number of inspections made to enforce compliance with anti-plague regulations.....	128
Number of vessels fumigated on arrival (on departure—0).....	20
Number of crew examined.....	12,423
Number of stowaways examined.....	2
Number of passengers examined.....	3,492
	15,917
Number of supplementary examinations.....	1,877
Number of persons vaccinated at port on arrival.....	218
Number of persons vaccinated at port of departure or en route.....	453
	671
Number of persons held in quarantine at the detention houses to complete period of incubation of yellow fever and bubonic plague.....	332
Number of poliomyelitis suspects detained.....	3
Number of persons held in quarantine on board vessels.....	1,796
	2,131
Total number of persons landed from foreign ports:	
Cabin.....	1,625
Steerage.....	803
	2,428
Total number of persons embarked for foreign ports:	
Cabin.....	1,572
Steerage.....	1,407
	2,979
Total number of persons arriving from coast towns.....	1,423
Total number of persons sailing for coast towns.....	1,434

Apparent decrease for month from foreign ports:	
Cabin (increase).....	53
Steerage (decrease).....	604
	<u>551</u>
Apparent decrease for month from coast towns.....	11
Number of clearances issued.....	65
Number of bills of health issued.....	91
Number of bills of health viséed.....	164
Number of immigrants recommended for rejection and deportation.....	24
	<u>3,851</u>
Total number of persons landed.....	3,851
Less number for Pacific ports.....	218
	<u>3,633</u>
Total number of persons sailing.....	4,413
Apparent decrease for month.....	780

## IMMIGRATION REPORT FOR COLON AND CRISTOBAL.

From—	Cabin.	Steerage.
Europe.....	20	17
United States.....	608	107
West Indies.....	69	189
Venezuela.....	17	13
Colombia.....	79	139
Cuba.....	79	13
Costa Rica.....	58	34
Bocas del Toro.....	48	192
Coast towns.....		161
	<u>978</u>	<u>865</u>
Grand total.....	1,843	

Men.....	874
Women.....	494
Children.....	230
United States troops.....	84
Unclassified.....	161
	<u>1,843</u>

## QUARANTINE TRANSACTIONS AT THE PORT OF BOCAS DEL TORO, PANAMA.

Number of vessels inspected and passed.....	14
Number of crew inspected and passed.....	1,284
Number of passengers inspected and passed.....	210
Number of passengers, transit, inspected and passed.....	181

No quarantinable disease has appeared in this port, and the health conditions of the port and surrounding territory continue good.

## TABLE XIX.—STATEMENT OF QUININE ISSUED.

Quinine sulphate (kilos).....	13.00
Pounds, avoirdupois.....	28.66

TABLE XX.—PERSONNEL REPORT.

	December, 1916.			November, 1916 (total employees).	December, 1915 (total employees).
	Gold employees.	Silver employees.	Total employees.		
Chief health officer.....	3	0	3	3	4
Medical storehouse.....	4	4	8	8	8
Quarantine division.....	12	34	46	46	38
Health office, Panama.....	12	140	152	164	173
Health office, Colon.....	10	148	158	163	171
Ancon Hospital.....	124	246	370	360	350
Colon Hospital.....	17	26	43	42	39
Santo Tomas Hospital.....	6	0	6	6	6
Palo Seco Leper Asylum.....	2	34	36	41	27
Zone sanitation.....	6	115	121	124	140
Hospital farm.....	2	66	68	69	55
Dispensaries:					
Balboa.....	5	3	8	8	6
Gamboa.....	1	0	1	1	1
Gatun.....	2	2	4	4	5
Paraiso.....	2	2	4	4	4
Pedro Miguel.....	2	1	3	3	3
Total.....	210	821	1,031	1,046	1,030





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